

REMARKS

Claims 1-36 are all the claims pending in the application. By this Amendment, Applicant cancels the withdrawn claims 25-36 without prejudice or disclaimer. Applicant amends claims 1 and 15 to further clarify the invention. Applicant also adds claims 37-50, which are supported throughout the specification.

I. Preliminary Matters

As preliminary matters, Applicant thanks the Examiner for acknowledging Applicant's claim to foreign priority and for indicating receipt of the certified copy of the priority document. Applicant thanks the Examiner for returning the initialed form PTO/SB/08 submitted with the Information Disclosure Statement filed on February 19, 2004. The Examiner has not indicated any objection to the drawing figures filed on September 2, 2003.

II. Summary of the Office Action

Claims 1-24 presently stand rejected under 35 U.S.C. § 112, second paragraph and under 35 U.S.C. § 101. Claims 1-3, 5-12 and 15-24 are rejected under 35 U.S.C. § 102(b) and claims 4, 13, and 14 are rejected under 35 U.S.C. § 103(a).

III. Claim Rejections under 35 U.S.C. § 112, second paragraph

Claims 1-24 are rejected under 35 U.S.C. § 112, second paragraph as being indefinite. Applicant respectfully traverses these grounds of rejections in view of the following comments.

First, the Examiner contends that when an "if" type clause is provided, an alternative must be specified (*see* page 2 of the Office Action). Applicant respectfully submits that **breadth of a claim is not to be equated with indefiniteness**. *In re Miller*, 441 F.2d 689, 169 USPQ 597

(CCPA 1971); MPEP § 2173.04. That is, there is no requirement to specify alternatives. In short, claim 1 recites “assigning...if the current position...lies within the regional sub-control area of the technical installation.” The quoted language is clear. This rejection of claim 1 is improper as it relates to the breath of the claim and not indefiniteness.

The Examiner further notes that the preamble of claim 1 is inconsistent with the body of claim 1 (*see* page 2 of the Office Action). Applicant respectfully thanks the Examiner for pointing out, with particularity, the aspects of the claim thought to be indefinite. Applicant respectfully requests the Examiner to withdraw this rejection in view of the self-explanatory claim amendment being made herein.

The Examiner further alleges that it is unclear what is meant by “assigning”. Applicant respectfully submits that an exemplary, non-limiting embodiment of the present invention describes a number of ways of assigning/pairing the exemplary universal control and monitoring module to the technical installation (*e.g.*, ¶¶ 41-43 of the specification). Applicant further respectfully submits that the specific details as to how the universal control and monitoring module is assigned to the technical installation relates to the breadth of the claim and is not an indefiniteness issue. In view of the foregoing remarks, Applicant respectfully requests the Examiner to withdraw this rejection of claim 1.

With respect to claim 7, the Examiner contends that it is unclear what is meant by updating and uploading the HMI data (*see* page 3 of the Office Action). Applicant respectfully disagrees. For example, in an exemplary embodiment of the present invention, it is disclosed that the exemplary universal control and monitoring module (into which the HMI data has been

loaded) allows the operator to specify setpoint values and/or other values, which are then uploaded into the HMI data module of the technical installation so as to change the operating state of the technical installation (*see* ¶ 43 of the specification). In short, it is respectfully submitted that claim 7 is clear and definite. Furthermore, it is respectfully noted that “how specifically is the HMI data uploaded into the installation” (*see* page 3 of the Office Action) relates to the breath of the claim and not its clarity. In view of the forgoing remarks, Applicant respectfully requests the Examiner to withdraw this rejection of claim 7.

With respect to claim 11, the Examiner contends that it is unclear “where” the HMI data is transmitted (*see* page 3 of the Office Action). Applicant respectfully submits that the specificity of “where” the data is transmitted relates to the breadth of the claim and not its clarity. It is respectfully submitted that an exemplary, non-limiting embodiment describes uploading and downloading HMI data as a function of the location of the exemplary universal control and monitoring module. Accordingly, it is respectfully submitted that transmitting (in a broader sense) may refer to at least one of transmitting from the exemplary universal control and monitoring module to the technical installation and transmitting from the technical installation to the exemplary universal control and monitoring module. In view of the forgoing remarks, Applicant respectfully requests the Examiner to withdraw this rejection of claim 11.

With respect to claim 12, the Examiner contends the meaning of this claim is unclear. Applicant respectfully directs the Examiner attention to an exemplary, non-limiting embodiment of the present invention where it is disclosed that the HMI data is transmitted as a function of location. In other words, certain functions may be performed when the technical installation is

outside of visibility from the location the exemplary universal control and monitoring module (*e.g.*, monitoring) while other functions may have to be performed only when the technical installation is visible (*e.g.*, changing certain parameters of the technical installation) from location of the exemplary universal control and monitoring module (*see* ¶ 46 of the specification). In view of the forgoing remarks, Applicant respectfully submits that the meaning of claim 12 is clear. Accordingly, Applicant respectfully requests the Examiner to withdraw this rejection of claim 12.

With respect to claim 15, the Examiner's rejection is not understood (*see* page 3 of the Office Action). The Examiner is respectfully directed to Fig. 4, which shows an exemplary HMI module that comprises 1st management unit (AUS), a 2nd management unit (AMU) that manages regional control, and a loading device (2nd data interface) that loads HMI data into the assigned universal mobile control and monitoring module. In view of the forgoing remarks, Applicant respectfully requests the Examiner to withdraw this rejection of claim 15.

With respect to claim 16, the Examiner contends that it is unclear what is meant by "cyclically" (*see* page 3 of the Office Action). Applicant respectfully submits that one of ordinary skill in the art is well aware (in light of the specification) that cyclical execution is a periodically repeatable execution (*i.e.*, execution in a cycle). Accordingly, it is Applicant's position that one of ordinary skill in the art in light of the specification could clearly ascertain the meaning of the term. In view of the forgoing remarks, Applicant respectfully requests the Examiner to withdraw this rejection of claim 16.

With respect to claims 23 and 24, the Examiner contends that one of ordinary skill in the art would not know what constitutes “short” range (*see* page 3 of the Office Action). Applicant respectfully disagrees. Applicant respectfully submits that one of ordinary skill in the art is well aware (in light of the specification) of what constitutes short-range communication *e.g.*, Bluetooth, infrared, etc. Accordingly, it is Applicant’s position that one of ordinary skill in the art in light of the specification could clearly ascertain the meaning of the term. In view of the forgoing remarks, Applicant respectfully requests the Examiner to withdraw this rejection of claims 23 and 24.

The Examiner further notes that claim 24 recites a trademark “Bluetooth” (*see* page 4 of the Office Action). Applicant respectfully thanks the Examiner for pointing out, with particularity, the aspects of the claim thought to be indefinite. Applicant respectfully submits that although “Bluetooth” is a trademark, “Bluetooth standard” as set forth in claim 24 is a well known communication standard that is commonly used in the claims in various different technological fields.¹ Accordingly, Applicant respectfully requests the Examiner to withdraw this rejection of claim 24.

IV. Claim Rejections under 35 U.S.C. § 101

Claims 1-24 are rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. Claim 1 recites: “loading human-machine-interface (HMI) data of the technical installation into the assigned universal mobile control and monitoring module.” That is, the data

¹ A search on the USPTO’s website shows over 800 patents using the term Bluetooth in the claims, *e.g.*, 7,181,657; 7,181,172; 7,180,507; 7,178,041; and 7,176,849.

is output from the technical installation into the assigned universal mobile control and monitoring module. Outputting data produces a tangible, real word result. Accordingly, Applicant respectfully requests the Examiner to withdraw this rejection of claims 1-14.

With respect to claim 15, Applicant respectfully notes that claim 15 is directed to a system comprising various devices such as a technical installation and at least one universal mobile control and monitoring module. In other words, the system claim 15 is not a manipulation of data but relates to various hardware components and interrelationship between these components. Accordingly, Applicant respectfully requests the Examiner to withdraw this rejection of claims 15-24.

V. Claim Rejections under 35 U.S.C. § 102

Claims 1-3, 5-12 and 15-24 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,167,464 to Kretschmann (hereinafter “Kretschmann”). Applicant respectfully traverses these grounds of rejection in view of the following comments.

To be an “anticipation” rejection under 35 U.S.C. § 102, the reference must teach every element and recitation of the Applicant’s claims. Rejections under 35 U.S.C. § 102 are proper only when the claimed subject matter is identically disclosed or described in the prior art. Thus, the reference must clearly and unequivocally disclose every element and recitation of the claimed invention. MPEP § 2131.

Of these rejected claims, only claims 1 and 15 are independent. Independent claims 1 and 15 *inter alia* and in some variation recite: controlling the technical installation using the HMI data loaded into the assigned universal mobile control and monitoring module.

Kretschmann relates to a mobile human machine interface for monitoring operation of a spatially distributed control system in a factory or the like. In particular, the mobile human machine interface provides a location signal to a central processor holding the control program and relevant I/O data. Based on that location signal, the mobile HMI receives data relevant to the machines near its location. As the user moves through the factory, its location signal changes and the data and program which it executes changes accordingly. The user may identify himself or herself to the mobile HMI providing for a second degree of discrimination in the type of data provided to the mobile HMI (*see* Abstract and col. 2, lines 23 to 55).

Kretschmann, however, only discloses monitoring the control process and not controlling the process via the portable HMI (col. 2, line 65 to col. 3, line 3). Specifically, Kretschmann discloses that the display of the display/keyboard 44 may, for example, show a portion of a ladder-logic representation 68 of control program 60 associated with the particular machine 18 near the portable HMI 28. Portions of the ladder-logic representation 68 may be highlighted to indicate the status of various inputs and outputs to and from the machine 18. The operator standing in the proximity of the machine 18 may thus confirm the status of these inputs and outputs, thereby monitoring and troubleshooting possible problems with the control program (Fig. 8, col. 6, lines 46 to 55). In short, in Kretschmann, the portable HMI 28 is used to monitor data related to the control process and not to control the process.

Therefore, controlling the technical installation using the HMI data loaded into the assigned universal mobile control and monitoring module, as set forth (in some variation) in claims 1 and 15, is not disclosed by Kretschmann, which lacks controlling the process using the

HMI 28. For at least these exemplary reasons, claims 1 and 15 are patentably distinguishable from Kretschmann. Accordingly, Applicant respectfully requests the Examiner to withdraw this rejection of claims 1 and 15 and their dependent claims 2, 3, 5-12 and 16-24.

In addition, Applicant respectfully notes that dependent claim 7 recites: “uploading the updated HMI data into the technical installation.” Kretschmann relates to monitoring the control process. That is, Kretschmann discloses displaying status of inputs and outputs of the control program (Fig. 8; col. 6, lines 46 to 55). Kretschmann does not disclose or suggest uploading the updated HMI data into the control process. For at least these additional exemplary reasons, claim 7 is patentably distinguishable from Kretschmann.

In addition, Applicant respectfully notes that dependent claim 11 recites: “transmitting the HMI data as a function of the current position of the assigned universal mobile control and monitoring module in the regional control sub-area of the assigned technical installation.” For example the HMI data transmitted is based on the position of the mobile control and monitoring module within the regional control sub-area of the assigned technical installation. Kretschmann, however, only discloses providing from the central processor 12 portions of a control process that relate to a machine 18 associated with the portable HMI 28 (Figs. 1-3; col. 5, line 66 to col. 6, line 12). Kretschmann does not disclose or suggest providing data based on the position of the already assigned HMI 28. Furthermore, Kretschmann does not disclose or suggest providing data based on where within the region of control the HMI 28 is located.

The Examiner relies on col. 7, lines 22 to 32 of Kretschmann, which recites:

In an alternative embodiment, that will be understood from the above description, the HMI 28 may hold no application programs

48, but instead, upon identification of the HMI 28 by the central processor 12, the central processor 12 may identify one or more applications (using a matrix 66) to be downloaded to the HMI. The user may identify one application and whether the downloaded application will be temporary or permanent depending on whether he or she will need it again, or the identification may be reserved to the central processor 12. In this way the HMI 28 is simplified and made more flexible for different uses.

As is visible, the above-quoted passage of Kretschmann is unrelated to transmitting data as a function of position. For at least these additional exemplary reasons, claim 7 is patentably distinguishable from Kretschmann.

Dependent claim 16 recites: “the managing device is configured to cyclically manage the HMI data of the technical installation.” The Examiner did not address these unique features of claim 16. It is Applicant’s position that Kretschmann does not disclose or suggest these unique features of claim 16. For at least these additional, exemplary reasons, claim 16 is patentably distinguishable from Kretschmann.

VI. Claim Rejections under 35 U.S.C. § 103

Claims 4, 13, and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kretschmann in view of Official Notice. Applicant respectfully traverses these grounds of rejection in view of the following comments.

Claim 4, 13, and 14 depend on claim 1. Applicant has already demonstrated that Kretschmann does not meet all the requirements of independent claim 1. Since claims 4, 13, and 14 depend on claim 1, they are patentable at least by virtue of their dependency.

In addition, these Official Notices are hereby challenged. The Examiner is respectfully requested to provide references for the allegedly well known features. From the tenor of the

grounds of this rejection, it would appear that the Examiner has formulated grounds of rejection which appear to be based not on actual prior art disclosure, but instead are based on a hindsight rationale that one of ordinary skill in the art, in theory, could have used the device of Kretschmann for alarms and could have used the mobile telephone or PDA as the HMI 28.

There are several reasons why, on the present record, the Patent Office can, and indeed must, grant the requested patent. First, as noted in MPEP § 2141, “[o]ffice policy has consistently been to follow Graham v. John Deere Co. in the consideration and determination of obviousness under 35 U.S.C. § 103.” Grounds of rejection based on a rationale such as the one just described distort each of the Graham factual inquiries, and produce a distorted determination as a result. Since **the rationale is not rooted in actual prior art**, productive discussion regarding the true scope and content of the prior art is no longer feasible. This, in turn, renders it impossible to clearly ascertain the actual differences between the prior art and the claims at issue. Second, since the rationale is a purely hypothetical construct, it is by its very nature a creature of hindsight, which makes any advance over the art incorrectly and improperly appear trivial.

VII. New Claims

In order to provide more varied protection, Applicant adds claims 37-50, which are patentable by virtue of their dependency and for additional features set forth therein.

VIII. Conclusion


In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. **If any points remain in issue, the**

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Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below for scheduling an Interview.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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